Appl. No. 09/933,630
Resp. dated Nov. 22, 2005
In Reply to Office Action Made Final of Nov. 18, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Original) A method for communicating over a time-division duplex channel, comprising:

(a)   receiving a first packet at a first frequency from a first slave device via the channel, wherein said first packet is received beginning at a first slot; and

(b)   determining whether said first packet is a multi-slot packet, and if so, transmitting a second packet to a second slave device via the channel at a second frequency different from said first frequency, wherein said second packet is transmitted after said first slot and prior to the end of said first packet.

2. (Original) The method of claim 1, wherein said first packet comprises a header having a packet type code indicative of the slot length of said first packet, and said determining comprises inferring whether said first packet is a multi-slot packet based on said packet type code.

3. (Previously Presented) The method of claim 1, wherein said second packet is transmitted during a first available transmit slot.

4. (Original) A computer readable media embodying a method for communicating over a time-division duplex channel, the method comprising:

(a)   receiving a first packet at a first frequency from a first slave device via the channel, wherein said first packet is received beginning at a first slot; and

(b)   determining whether said first packet is a multi-slot packet, and if so, transmitting a second packet to a second slave device via the channel at a second frequency different from said first frequency, wherein said second packet is transmitted after said first slot and prior to the end of said first packet.

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5.   (Original) The computer readable media of claim 4, wherein said first packet comprises a header having a packet type code indicative of the slot length of said first packet, and said determining comprises inferring whether said first packet is a multi-slot packet based on said packet type code.

6.   (Original) The computer readable media of claim 4, wherein said second packet is transmitted during the first available transmit slot.

7.   (Original) A wireless device for communicating over a time-division duplex channel, said wireless device comprising:

(a)   a first radio configured to receive a multi-slot packet at a first frequency from a first slave via the channel, wherein said multi-slot packet is received during a first slot;

(b)   means for determining whether said first packet is a multi-slot packet; and

(c)   a second radio configured to transmit a second packet to a second slave responsive to said means making a positive determination, wherein said second packet is transmitted via the channel at a second frequency different from said first frequency after said first slot and prior to the end of said first packet.

8.   (Original) The wireless device of claim 7, wherein said wireless device acts as a master to said first slave and said second slave.

9.   (Original) The wireless device of claim 7, wherein said wireless device comprises a network access point coupled to a network.

10.   (Original) The wireless device of claim 7, wherein said first radio comprises a receive-only radio.

11.   (Original) The wireless device of claim 7, wherein said first and second radios comprise 2.4 GHz Bluetooth radios.

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12. (Original) The wireless device of claim 7, wherein said first packet comprises a header having a packet type code indicative of the slot length of said first packet, and said means for determining comprises means for inferring whether said first packet is a multi-slot packet based on said packet type code.

13. (Original) The wireless device of claim 7, wherein said second packet is transmitted during the first available transmit slot.

Claims 14 and 15 (Cancelled)

16. (Original) A system comprising:

(a)   a time-division duplex channel;

(b)   a first slave device configured to transmit a first packet over said time-division duplex channel at a first frequency during a first time slot;

(c)   a master device, configured to receive said first packet, to determine whether said first packet is a multi-slot packet, and if so, to transmit a second packet over said time-division duplex channel at a second frequency different from said first frequency, wherein said second packet is transmitted after said first slot and prior to the end of said first packet; and

(d)   a second slave device configured to receive said second packet.

17. (Original) The system of claim 16, wherein said master device is master of a piconet that includes said first slave and said second slave.

18. (Original) The system of claim 16, wherein said master device comprises a network access point coupled to a network.

19. (Original) The system of claim 16, wherein said first packet comprises a header having a packet type code indicative of the slot length of said first packet, and wherein said master device is configured to infer whether said first packet is a multi-slot packet based on said packet type code.

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20. (Original) The system of claim 16, wherein said second packet is transmitted during the first available transmit slot.

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